

16367 U.S. PTO
021004

Attorney Docket No. SAM-0105DIV
PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Mail Stop Patent Application
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

NEW APPLICATION TRANSMITTAL

22387 U.S. PTO
10/775270
021004

Transmitted herewith for filing is the patent application of

Inventor(s): Young-Kwang Kim
Hee-Sung Kang

For (title): SEMICONDUCTOR DEVICE
HAVING JUNCTION DIODE AND
FABRICATING METHOD
THEREFOR

1. **Type of Application** This new application is for
a(n)

- ☐ Original (nonprovisional)
☐ Design
☐ Plant
☒ Divisional.
☐ Continuation.
☐ Continuation-in-part (C-I-P).

2. **Benefit of Prior Application(s)**

- ☒ The new application is a divisional application of U.S. patent application no. 09/645,285, filed on August 24, 2000, which claims priority to Korean patent application 99-42805 filed October 5, 1999. See Item 7.

3. **Papers Enclosed**

18 Pages of specification
4 Pages of claims
1 Page of Abstract
11 Sheets of drawings
☒ formal
☐ informal
 Page of Cover Sheet

- ☐ The enclosed drawing(s) are photograph(s), and there is also attached a "PETITION TO ACCEPT PHOTOGRAPH(S) AS DRAWING(S)." 37 C.F.R. 1.84(b).

<p align="center">CERTIFICATE OF MAILING 37 C.F.R. § 1.10</p> <p>"Express Mail" Mailing Label Number <u>EV322657287US</u></p> <p>I hereby certify that this paper or fee is being deposited with the United States Postal Service "Express Mail Post Office to Addressee" service under 37 CFR 1.10 on the date indicated above and is addressed to Mail Stop Patent Application, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.</p> <p>Date: <u>2/10/04</u> <u>Vanessa Marakas</u> Vanessa Marakas</p> <p><u>Vanessa Marakas</u> Print Name</p>
--

4. Additional papers enclosed

- ☐ Preliminary Amendment
- ☐ Information Disclosure Statement (37 C.F.R. 1.98)
- ☐ Form PTO-1449 (PTO/SB/08A and 08B)
- ☐ Copies of cited references
- ☐ Declaration of Biological Deposit
- ☐ Submission of "Sequence Listing," computer readable copy and/or amendment pertaining thereto for biotechnology invention containing nucleotide and/or amino acid sequence.
- ☐ Authorization of Attorney(s) to Accept and Follow Instructions from Representative
- ☐ Special Comments
- ☒ Other: Return Postcard.

5. Declaration or oath

- ☒ Enclosed
 - ☐ Unexecuted
 - ☒ Executed by
 - ☒ inventors. The enclosed Declaration is a true copy of the Declaration filed in U.S. patent application serial no. 09/645,285, the parent of the present divisional application.
 - ☐ legal representative of inventor(s).
37 CFR 1.42 or 1.43.
 - ☐ joint inventor or person showing a proprietary interest on behalf of inventor who refused to sign or cannot be reached.
 - ☐ This is the petition required by 37 CFR 1.47 and the statement required by 37 CFR 1.47 is also attached. See item 12 below for fee.
- ☐ Not Enclosed
- ☐ Application is made by a person authorized under 37 C.F.R. 1.41 (c) on behalf of all the above named inventor(s).
 - ☐ Showing that the filing is authorized.

6. Assignment

- ☒ An assignment of the invention to Samsung Electronics Co., Ltd.
 - ☐ is attached. A separate ☐ "COVER SHEET FOR ASSIGNMENT (DOCUMENT) ACCOMPANYING NEW PATENT APPLICATION" or ☐ FORM PTO 1595 is also attached.
 - ☐ will follow.
 - ☒ was filed in parent application U.S. serial no. 09/645,285.

7. Certified Copy

Certified copy(ies) of application(s)

Korea	99-42805	October 5, 1999
Country	Appln. no.	Filed
Country	Appln. no.	Filed
Country	Appln. no.	Filed

from which priority is claimed

- ☐ is (are) attached.
- ☐ will follow.
- ☒ was filed in U.S. Serial No. 09/645,285, the parent of the present U.S. patent application

8. Fee Calculation (37 C.F.R. 1.16)

CLAIMS AS FILED				
	Number filed		Number Extra	Rate
				Basic Fee 37 C.F.R. 1.16(a) \$770.00
Total				
Claims (37 CFR 1.16(c))	12	- 20 =	0	\$ 18.00
Independent				
Claims (37 CFR 1.16(b))	2	- 3 =	0	\$ 86.00
Multiple dependent claim(s), if any (37 CFR 1.16(d))			+	\$290.00

- ☐ Amendment canceling extra claims is enclosed.
- ☐ Amendment deleting multiple-dependencies is enclosed.
- ☐ Fee for extra claims is not being paid at this time.

Filing Fee Calculation

\$ 770.00

9. Fee Payment Being Made at This Time

☐ Not Enclosed

☐ No filing fee is to be paid at this time.

(This and the surcharge required by 37 C.F.R. 1.16(e) can be paid subsequently.)

☒ Enclosed

☒ Basic filing fee

\$ 770.00

☐ Recording assignment

(\$40.00; 37 C.F.R. 1.21(h))

(See attached "COVER SHEET FOR ASSIGNMENT
ACCOMPANYING NEW APPLICATION".)

\$ _____

Total fees enclosed

\$ 770.00

10. Method of Payment of Fees

☒ Check in the amount of \$ 770.00

☐ Charge Account No. 50-1798 in the amount of
A duplicate of this transmittal is attached.

\$ _____

11. Authorization to Charge Additional Fees

☒ The Commissioner is hereby authorized to charge the following additional fees during the entire pendency of this application to Account No. 50-1798.

☒ 37 C.F.R. 1.16(a), (f) or (g) (filing fees)

☒ 37 C.F.R. 1.16(b), (c) and (d) (presentation of extra claims)

☐ 37 C.F.R. 1.16(e) (surcharge for filing the basic filing fee and/or declaration on a date later than the filing date of the application)

☐ 37 C.F.R. 1.17 (application processing fees)

☐ 37 C.F.R. 1.18 (issue fee at or before mailing of Notice of Allowance, pursuant to 37 C.F.R. 1.311(b))

12. Instructions as to Overpayment

☒ Credit Account No. 50-1798

☐ Refund

Date:

February 10, 2009

Mills & Onello LLP

Eleven Beacon Street, Suite 605

Boston, MA 02108

Telephone: (617) 994-4900

Facsimile: (617) 742-7774

J:\SAM\0105DIV\DIVapppatentranslr.wpd

Respectfully submitted,



Anthony P. Onello, Jr.

Registration Number 38,572

Attorney for Applicants

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant(s): Young-Kwang Kim, *et al.*
Filing Date: Herewith
Serial No.: Divisional of U.S. Serial No. 09/645,285, filed August 24, 2000
Title: SEMICONDUCTOR DEVICE HAVING JUNCTION DIODE
AND FABRICATING METHOD THEREFOR

CERTIFICATE OF MAILING UNDER 37 C.F.R. § 1.10

"Express Mail" Mailing Label Number EV322657287US I hereby certify that this paper or fee is being deposited with the United States Postal Service "Express Mail Post Office to Addressee" service under 37 CFR 1.10 on the date indicated below and is addressed to Mail Stop Patent Application, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

2-10-04

Date

Vanessa Marakas

Vanessa Marakas

Mail Stop Patent Application
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

TRANSMITTAL LETTER

Sir:

Enclosed herewith for filing in the above-identified patent application please find the following listed items:

1. New Application Transmittal;
2. New Divisional Patent Application;
3. Eleven (11) Sheets of Formal Drawings (Figures 1-6, 7A-7D, 8-11 and 12A-12D);
4. Copy of Executed Declaration, Petition and Power of Attorney;
5. Notice of Change in Power of Attorney and Correspondence Address;
6. Check in the amount of \$770.00 to cover requisite fee; and
7. Return Postcard.

In connection with the foregoing matter, please charge any additional fees which may be due, or credit any overpayment, to Deposit Account Number 50-1798. A duplicate copy of this letter is provided for this purpose.

Respectfully submitted,

Date: February 10, 2004
Mills & Onello LLP
Eleven Beacon Street, Suite 605
Boston, MA 02108
Telephone: (617) 994-4900
Facsimile: (617) 742-7774
J:\SAM\0105DIV\DIVtransappln.wpd

Anthony P. Onello, Jr.
Anthony P. Onello, Jr.
Registration Number 38,572
Attorney for Applicants

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

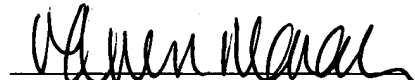
Applicant(s): Young-Kwang Kim, *et al.*
Filing Date: Herewith
Serial No.: Divisional of U.S. Serial No. 09/645,285, filed August 24, 2000
Title: SEMICONDUCTOR DEVICE HAVING JUNCTION DIODE
AND FABRICATING METHOD THEREFOR

CERTIFICATE OF MAILING UNDER 37 C.F.R. § 1.10

"Express Mail" Mailing Label Number EV322657287US I hereby certify that this paper or fee is being deposited with the United States Postal Service "Express Mail Post Office to Addressee" service under 37 CFR 1.10 on the date indicated below and is addressed to Mail Stop Patent Application, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

2-10-01

Date


Vanessa Marakas

Mail Stop Patent Application
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

NOTICE OF CHANGE IN POWER OF ATTORNEY AND CORRESPONDENCE ADDRESS

Sir:

The correspondence address in the divisional application filed herewith is as follows:

SEND CORRESPONDENCE TO:

Anthony P. Onello, Jr., Esq.
Mills & Onello LLP
Eleven Beacon Street, Suite 605
Boston, Massachusetts 02108

DIRECT TELEPHONE CALLS TO:

Anthony P. Onello, Jr., Esq.

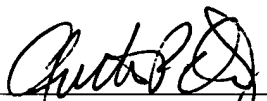
(617) 994-4900

Applicant(s): Young-Kwang Kim, *et al.*

The power of attorney and correspondence address were changed to the above in U.S. application serial number 09/645,285, the parent of the present divisional application. Copies of the documents effecting the change in power of attorney and correspondence address in the parent application are enclosed.

Respectfully submitted,

Date: February 10, 2009
Mills & Onello LLP
Eleven Beacon Street, Suite 605
Boston, MA 02108
Telephone: (617) 994-4900
Facsimile: (617) 742-7774
J:\SAM\0105DIV\changeinpoa.wpd


Anthony P. Onello, Jr.
Registration Number 38,572
Attorney for Applicants